

**Remarks**

By the present amendment, claims 1, 5, 13-14, 31-32, 38, and 40 have been amended to more clearly define the claimed invention and to maintain proper dependencies. Claims 19-26, 34-35, 37, and 42-47 have been withdrawn. Claims 2, 3, 7, and 8 have been canceled, without prejudice or disclaimer. Accordingly, claims 1, 4-6, 9-18, 27-33, 36, and 38-41 are pending in the present application. It is believed and intended that no new matter has been added by this amendment. Reconsideration and allowance of all pending claims are respectfully requested in view of the following remarks.

**I. Preliminary Matters**

The Examiner's indication of receipt of the priority papers submitted under 35 U.S.C. § 119 on April 25, 2007 and of the Information Disclosure Statements filed July 21, 2006 and May 1, 2008 is gratefully acknowledged.

**II. Claim Objection**

The Examiner suggested amendments to claims 8, 32, and 38 as having listed informalities. Claim 8 has been canceled, thus mooting the issue with respect thereto, and claims 32 and 38 have been amended to correct these informalities.

**III. Claim Rejections Under 35 U.S.C. § 112**

Claim 5, 12, and 38 were rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, with the Examiner citing several instances of antecedent basis issues. Claims 5, 9 and 38 have been amended to overcome the

rejection. Such amendments are not made in response to the prior art and do not narrow the scope of the claims.

**IV. Claim Rejections Under 35 U.S.C. § 102**

Claims 1, 7, 14, 27-28, and 38-41 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,992,527 issued November 30, 1999 to David Garnham et al. (hereafter referenced as “the ‘527 patent”). It is respectfully submitted that the present amendments to the pending claims overcome this rejection for at least the following reasons.

Claim 1 has been amended to incorporate the subject matter of claims 2-3 and 7-8. Since claims 2-3 and 8 were not rejected over the ‘527 patent, it is respectfully submitted that the ‘527 patent does not anticipate claim 1, as amended, under 35 U.S.C. § 102(b) and the present rejection should be withdrawn.

Independent claims 14, 38, and 40 have been amended include similar recitations to those added here to claim 1, and therefore are believed to be patentable for at least the same reasons.

Since each of dependent claims 7, 27-28, 39, and 41 are dependent upon one of independent claims 1, 14, 38, and 40, which are believed to be patentable as set forth above, it is respectfully submitted that the dependent claims are patentable at least by virtue of their dependency, as well as for the separate recitations therein. Accordingly, the allowance of claims 1, 7, 14, 27-28, and 38-41 is respectfully requested.

**V. Claim Rejections Under 35 U.S.C. § 103**

Claims 2-5 and 36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '527 patent alone. It is respectfully submitted that the present amendments to the pending claims overcome this rejection for at least the following reasons.

Claims 2 and 3 were canceled, with the subject matter thereof incorporated into independent claim 1. Though this cancellation moots the present rejection under 35 U.S.C. § 103(a) with respect to these claims, the Applicants presume that the Examiner will consider the present rejection to apply to claim 1 by virtue of this amendment. Therefore, the following comments should be considered to apply to claim 1, as amended, to advance prosecution of the present application.

The Examiner asserts, in section 19 of the November 6 Office Action, that "it would have been an obvious matter of design choice to have a production bore which is offset from the centre of the valve housing, a valve element which is a ball valve with a valve bore offset from the centre of the ball, and an offset bore valve seat, as Applicant has not disclosed that it solves any stated problem of the prior art or is for any particular purpose". In response to this assertion by the Examiner, the Applicants respectfully draw the Examiner's attention to the disclosure in lines 4-18 of page 7, and from line 15 of page 21 to line 10 of page 22 of the specification, where the Applicants do describe the need for an offset ball valve arrangement<sup>1</sup> and the way in which this problem is solved by the present invention.

---

<sup>1</sup> See, e.g., p. 7, lines 15-18: "[A]pertured ball valves may fulfil the identified requirement [i.e., a combination of throughbore and pressure capacity] but existing solutions require a centralised ball valve which does not fit within the established envelope restrictions of a tool."

Accordingly, the Applicants respectfully submit that the offset nature of at least one of the production bore, the valve bore, and the bore valve seat was not a mere design choice, but was provided to the present invention as a way to address known problems in the art, which is not solved by the prior art references of record. In view of the foregoing, it is respectfully submitted that claim 1 is not obvious in view of the prior art references of record and is allowable.

Since dependent claims 4-5 and 36 are dependent upon independent claim 1, which is believed to be patentable as set forth above, it is respectfully submitted that the dependent claims are patentable at least by virtue of their dependency, as well as for the separate recitations therein. Accordingly, the allowance of claims 1, 4-5, and 36 is respectfully requested.

Claims 6, 9-12, 15, 18, and 31-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '527 patent in view of U.S. Patent No. 5,884,703, issued March 23, 1999 to Virgilio Garcia-Soule et al. (hereafter referenced as "the '703 patent"). It is respectfully submitted that the present amendments to the pending claims overcome this rejection for at least the following reasons.

Since dependent claims 6, 9-12, 15, 18, and 31-33 are each dependent upon one of independent claims 1 and 14, which are believed to be patentable as set forth above, it is respectfully submitted that the dependent claims are patentable at least by virtue of their dependency, as well as for the separate recitations therein. Accordingly, the allowance of claims 6, 9-12, 15, 18, and 31-33 is respectfully requested.

Claims 8, 13, 16-17, and 29-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '527 patent in view of U.S. Patent No. 5,884,706, issued March 23, 1999 to Jeffrey Charles Edwards (hereafter referenced as "the '706 patent"). It is respectfully submitted that the present amendments to the pending claims overcome this rejection for at least the following reasons.

Claim 8 was canceled, with the subject matter thereof incorporated into independent claim 1. Though this cancellation moots the present rejection under 35 U.S.C. § 103(a) with respect to this claim, the Applicants presume that the Examiner will consider the present rejection to apply to claim 1 by virtue of this amendment. Therefore, the following comments should be considered to apply to claim 1, as amended, to advance prosecution of the present application.

It is respectfully submitted that neither the '527 patent, the '706 patent, nor any combination thereof teaches, shows, discloses, or suggests the claimed arrangement of a guide shaft connected in a pin joint arrangement to actuation bars, which permits the guide shaft(s) to move in a chamber(s) defined by a redundant part of the valve housing (as seen in Fig. 12C of the present application). Using pivotally mounted actuation bars allows force to be applied directly on the axis of rotation of the valve element because, as shown in Figs. 5a-5d of the present application, the actuation bars pass directly through the axis of rotation. In contrast, the spigots of the '706 patent (which are equivalent to the claimed actuation bars) are fixed to the mandrel. Therefore, the recess in which the spigots of the '706 patent act has to be displaced from the axis of rotation or the valve element of the '706 patent will not rotate. An arrangement such as that taught by

the '706 patent requires that the guide shafts be immediately adjacent the ball element, rather than displaced from the ball element as claimed, because the spigots of the '706 patent have to act directly on the valve element.

Moreover, the '706 patent does not teach multiple guide shafts, as presently claimed. Instead, the '706 patent teaches a tubular operating mandrel 32. As the mandrel 32 of the '706 patent has to enclose the bore of the valve, it would not be possible to achieve an offset throughbore (such as that shown in Fig. 12 of the present application) in which the throughbore is located adjacent an extreme edge of the valve housing.

In view of the foregoing, it is respectfully submitted that claim 1 is not obvious in view of the prior art references of record and is allowable.

Since dependent claims 13, 16-17, and 29-30 are each dependent upon one of independent claims 1 and 14, which are believed to be patentable as set forth above, it is respectfully submitted that the dependent claims are patentable at least by virtue of their dependency, as well as for the separate recitations therein.

Accordingly, the allowance of claims 13, 16-17, and 29-30 is respectfully requested.

## VI. Conclusion

In view of the foregoing, reconsideration and allowance of this application are believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 20-0090. Please also credit any overpayments to this Deposit Account.

Respectfully submitted,

**/Richard S. Wesorick/**

Richard S. Wesorick  
Reg. No. 40,871

TAROLLI, SUNDHEIM, COVELL,  
& TUMMINO L.L.P.  
1300 East Ninth Street, Suite 1700  
Cleveland, Ohio 44114  
Phone:(216) 621-2234  
Fax: (216) 621-4072  
Customer No. 26,294